REMARKS

Claims 1 through 18 are currently pending in this application, new Claims 16-18 having been added by the foregoing amendment.

Applicants acknowledge the indication of the allowability of the subject matter of Claims 4, 5 and 11, as set forth at paragraphs 9 and 10 of the Office Action. In particular, Claims 4 and 5 would be allowable if rewritten in independent form, while Claim 11 would be allowable if rewritten to overcome the formal grounds of rejection under 35 U.S.C. §112, second paragraph, and if rewritten in independent form. However, for the reasons set forth hereinafter, Applicants respectfully submit that Claims 4, 5 and 11 are allowable in their present dependent form.

Claims 3, 11 and 15 have been rejected under 35 U.S.C. §112, second paragraph for failing to particularly point out and distinctly claim the invention, based on certain formal issues cited by the Examiner in paragraphs 2-4 of the Office Action. In response to these grounds of rejection, Applicants have amended Claims 3, 11 and 15 in a manner which addresses and is believed to resolve each of the cited formal issues. Accordingly, reconsideration and withdrawal of this ground of rejection is respectfully requested.

Claims 1-3, 6-8 and 12-15 have been rejected under 35 U.S.C. §102(b) as anticipated by Mano & Kime, *Logic and Computer Design Fundamentals*

(hereinafter, "Mano & Kime"), while Claims 9 and 10 have been rejected under 35 U.S.C. §103(a) as unpatentable over Mano & Kime, and further in view of Yoon (U.S. Patent No. 6,697,995). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims of record in this application distinguish over the cited references, whether considered separately or in combination.

The present invention is directed to an element which is suitable for use as a component in a system for carrying out and documenting a program or test sequence, for example, in a motor vehicle. In particular, the element according to the invention is a "simulation element" which allows specific functions to be carried out. As indicated at paragraph 41 of the specification, the elements can be divided into two groups based on their functionality: those which are "monitoring elements", which govern the propagation of external control signals throughout the system, and hence the activation and deactivation of the controlling elements within the system, and "data processing elements", which simulate and monitor variables that are provided by the test system. The linking of such elements together allows even complex systems to be simulated, documented, run and/or tested as noted in paragraph [0010].

As illustrated generically in Figure 1 of the drawing, the element according to the invention may include a control input 3 for receiving an external control signal 2, as well as a control output 4, at which an external control signal

can be provided. In addition, one or more data inputs 6, 7 are provided for the receipt of data input signals 8, 9, as well as one or more data outputs 12, 13 at which data output signals 14, 15 may be generated. The reference numeral 10 designates a variable which assumes one of two values (referred to arbitrarily as 0 and 1), depending on whether the element 1 is in an activated or deactivated state. The variable 10 in turn can be altered in various predetermined ways by the control in put signal 2, which controls the manner in which the element 1 performs its functionality. In addition, the reference numeral 11 designates a parameter, which can be entered into the element 1, and which controls the conditions under which the variable 10 assumes a 1 or a 0 date. As illustrated in Figures 2 through 17, the generic configuration of Figure 1 can be structured in various ways, such that each of the elements shown in Figures 2 through 17 is capable of performing different functionality.

The primary Mano & Kime reference, on the other hand, provides a basic definition and discussion of sequential circuits, including conventional devices such as latches and flip-flops. As noted, for example, in the Abstract which precedes Section 4-1, latches and flip-flops are basic elements for storing binary information in a sequential circuit. As shown in Figure 4-1 on page 174, a basic sequential circuit comprises a combinational circuit and storage elements connected in a loop, so that next data information output by the combinational circuit can be stored in the storage elements, and the present state information

provided as feedback input to the combinational circuit. The binary value of the outputs of the circuit is determined by binary information received from the environment, as well as the present state of the storage elements.

It can thus be seen that the basic flip-flops, latches and sequential circuits discussed in Mano & Kime differ fundamentally from the present invention, which (referring, for example, to Claim 1) defines an element for carrying out and documenting a program or test sequence, in which the element itself is configured to perform a particular function for that purpose. Moreover, the functionality performed by the element "can be varied by the element in a manner determined in response to a value" of a variable stored in the element itself. The variable, in turn, can be varied as a function of the external control signal. Accordingly, the element defined in Figure 1 provides a basic building block, from which a system for implementing a program or test sequence can be formed. As noted previously, the linking of such basic elements, each having variable functionality which can be altered by means of an input control signal, allows even complex systems to be simulated, documented, run and tested. Accordingly, the element as defined in Claim 1, as amended, differs from the flip-flops and latches described in Mano & Kime.

The Yoon patent, on the other hand, is cited in paragraph 8 of the Office Action as disclosing simply that, after all logic operations have been performed, a time elapsed to perform all the logic operations is compared with a

predetermined time to check for errors. It is apparent, therefore, that those features of the present invention as discussed above with regard to Claim 1 are neither taught nor suggested by Yoon. Moreover, the same features are also incorporated into Claims 12 and 13.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #225/50239).

Respectfully submitted,

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